

STEVENSON-WYDLER (15 USC 3710a)
COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT

Between

WESTINGHOUSE SAVANNAH RIVER COMPANY LLC

and

(PARTICIPANT'S NAME)

for

(PROJECT TITLE)

WSRC CRADA No. CR-_____

Westinghouse Savannah River Company LLC
Aiken, South Carolina 29803

_____, _____

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STEVENSON-WYDLER (15 USC 3710a)
COOPERATIVE RESEARCH AND DEVELOPMENT
AGREEMENT (hereinafter "CRADA") NO. _____

between

WESTINGHOUSE SAVANNAH RIVER COMPANY LLC
under its U.S. Department of Energy Contract
No. DE-AC09-96SR18500

and

(PARTICIPANT'S NAME)

for

(PROJECT TITLE)

This Cooperative Research and Development Agreement (hereinafter referred to as "CRADA") is between WESTINGHOUSE SAVANNAH RIVER COMPANY LLC (hereinafter referred to as "WSRC"), a corporation organized and existing under the laws of the State of Delaware and having an administration office address at Savannah River Site, Building 719-4A, Aiken, South Carolina 29808, and _____ (Company Name) _____ (hereinafter referred to as the "Participant"), a corporation having its principal place of business at _____ (Company Address) _____. Both WSRC and the Participant to this Agreement are hereinafter jointly referred to as the "Parties".

WSRC is entering into this CRADA under the National Competitiveness Technology Transfer Act of 1989 (15 USC 3710) and the terms of its Contract No. DE-AC09-96SR18500 with the United States Department of Energy (DOE) for the management and operation of the Savannah River Site. Work to be performed by WSRC's employees is expected to be at the Savannah River Site, owned by the DOE, in and around Aiken, South Carolina.

ARTICLE I: DEFINITIONS

- A. "Government" means the Federal Government of the United States of America and agencies thereof.
- B. "DOE" means the Department of Energy, an agency of the Federal Government.
- C. "Contracting Officer" means the DOE employee administering WSRC's DOE contract.
- D. "Generated Information" means information produced in the performance of this CRADA.
- E. "Proprietary Information" means information which is developed at private expense outside of this CRADA, is marked as Proprietary Information, and embodies (i) trade secrets or (ii) commercial or financial information which is privileged or confidential under the Freedom of Information Act (5 USC 552 (b)(4)).
- F. "Protected CRADA Information" means Generated Information which is marked as being Protected CRADA Information by a Party to this CRADA and which would have been Proprietary Information had it been obtained from a non-Federal entity.
- G. "Subject Invention " means any invention of WSRC or Participant conceived or first actually reduced to practice in the performance of work under this CRADA.
- H. "Intellectual Property" means Patents, Copyrights, Trademarks, Mask Works, Protected CRADA Information and other forms of comparable property rights protected by Federal law and foreign counterparts, except trade secrets.
- I. "Trademark" means a distinctive mark, symbol or emblem used in commerce by a producer or manufacturer to identify and distinguish its goods or services from those of others.
- J. "Service Mark" means a distinctive work, slogan, design, picture, symbol or any combination thereof, used in commerce by a person to identify and distinguish its services from those of others.

- K. "Mask Work" means a series of related images, however fixed or encoded, having or representing the predetermined, three-dimensional pattern of metallic, insulating or semiconductor material present or removed from the layers of a semiconductor chip product, and in which series the relation of the images to one another is that each image has the pattern of the surface of one form of the semiconductor chip product (17 USC 901(a)(2)).
- L. "Background Intellectual Property" means the Intellectual Property rights identified by the Parties in Appendix B, Background Intellectual Property, which was in existence prior to or is first produced outside of this CRADA, except that in the case of inventions in those identified items, the inventions must have been conceived outside of this CRADA and not first actually reduced to practice under this CRADA to qualify as Background Intellectual Property. Licensing of Background Intellectual Property, if agreed to by the Parties, shall be the subject of separate licensing agreements between the Parties. Background Intellectual Properties are not Subject Inventions.

ARTICLE II: STATEMENT OF WORK

Appendix A, Statement of Work, is an integral part of this CRADA. -

ARTICLE III: TERM, FUNDING, AND COSTS

- A. The effective date of this CRADA shall be (1) the date on which it is signed by the last of the Parties hereto or (2) the date on which it is approved by DOE, whichever is later. The work to be performed under this CRADA shall be completed within _____ months from the effective date.
- B. The total estimated cost of work under this CRADA is _____ Dollars (\$ TBD). The Participant's estimated contribution is _____ Dollars (\$ TBD). The estimated cost of WSRC effort under the CRADA, which is being provided through WSRC's prime contract with DOE, subject to available funding, [or] which will be funded in its entirety by the Participant (See Article III.E below), is _____ (\$ TBD). The Participant's contribution to this CRADA is limited to in-kind effort; accordingly, the three percent (3%) Federal

administrative charge is not applicable. *[or]* A three percent (3%) Federal administrative charge will be additionally payable on the cost of the WSRC effort funded by the Participant.

- C. Neither Party shall have an obligation to continue or complete performance of its work at a cost in excess of its estimated contribution, as contained in Article III.B above, including any subsequent amendment.
- D. Each Party agrees to provide at least thirty (30) days notice to the other Party if the actual cost to complete performance will exceed its estimated contribution.
- E. Reserved. *[Or, if this is a funds-in CRADA where the cost is greater than \$25,000 and the work will last longer than 90 days:]* The Participant will provide sufficient advance funds to WSRC to maintain a continuous 90-day funding balance during the entire period of performance. To maintain this advance, Participant agrees to make payments so as to reach WSRC in accordance with the following schedule:

<u>Months after Inception</u>	<u>Amount</u>
<u>At execution</u>	
<u>1</u>	
<u>2</u>	
<u>3</u>	
<u>4</u>	
<u>(As required)</u>	—

[Or, if this is a funds-in CRADA where the cost is less than \$25,000 or the work will be completed in less than 120 days:] The Participant will make a single payment to WSRC of \$_____ (TBD) to cover costs anticipated to be incurred by WSRC during the period of performance as well as the 3% Federal administrative fee applicable to those costs.

Payments should be made by check identifying this CRADA mailed to:

Westinghouse Savannah River Company LLC
Financial Management
Savannah River Site, Building 730-B
Aiken, SC 29808-9808

No work may begin on the CRADA until any advance payment required is in place. In the event Participant fails to maintain any 90-day advance funding balance identified by this Paragraph E, WSRC must stop work. Work will only be resumed upon the replenishment of the 90-day advance funding balance. Any unused funds will be returned to the Participant upon completion of the CRADA.

ARTICLE IV: PERSONAL PROPERTY

All tangible personal property produced or acquired under this CRADA (specifically excluding Intellectual Property rights, Background Intellectual Property, and Proprietary Information) shall become the property of the Participant or the Government, depending upon whose funds were used to obtain it. Such property is identified in Appendix A, Statement of Work. Personal property shall be disposed of as directed by the owner at the owner's expense. There shall not be any jointly funded property under this CRADA except by the mutual agreement of the Parties.

ARTICLE V: DISCLAIMER

THE GOVERNMENT, THE PARTICIPANT, AND WSRC MAKE NO EXPRESS OR IMPLIED WARRANTY AS TO THE CONDITIONS OF THE RESEARCH OR ANY INTELLECTUAL PROPERTY, GENERATED INFORMATION, OR PRODUCT MADE, OR DEVELOPED UNDER THIS CRADA, OR THE OWNERSHIP, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE RESEARCH OR RESULTING PRODUCT. NEITHER THE GOVERNMENT, THE PARTICIPANT, NOR WSRC SHALL BE LIABLE FOR SPECIAL, CONSEQUENTIAL OR INCIDENTAL DAMAGES ATTRIBUTED TO SUCH RESEARCH OR RESULTING PRODUCT, INTELLECTUAL PROPERTY, GENERATED INFORMATION OR PRODUCT MADE OR DEVELOPED UNDER THIS CRADA.

ARTICLE VI: PRODUCT LIABILITY

Except for any liability resulting from any negligent acts or omissions of WSRC, the Participant indemnifies the Government and WSRC for all damages, costs and expenses, including attorney's fees, arising from personal injury or property damage occurring as a result of the making, using or selling of a product, process or service by or on behalf of the Participant, its assignees, or licensees, which was derived from the work performed under this CRADA. In respect to this Article, neither the Government nor WSRC shall be considered assignees or licensees of the Participant, as a result of reserved Government and WSRC rights. The indemnity set forth in this paragraph shall apply only if Participant shall have been informed as soon and as completely as practical by WSRC and/or the Government of the action alleging such claim and shall have been given an opportunity, to the maximum extent afforded by applicable laws, rules, or regulations, to participate in and control its defense, and WSRC and/or Government shall have provided all reasonably available information and reasonable assistance requested by Participant. No settlement for which Participant would be responsible shall be made without Participant's consent unless required by final decree of a court of competent jurisdiction.

ARTICLE VII: OBLIGATIONS AS TO PROPRIETARY INFORMATION

- A. Each Party agrees to not disclose Proprietary Information provided by another Party to anyone other than the CRADA Participant and WSRC without written approval of the providing Party, except to Government employees who are subject to the statutory provisions against disclosure of confidential information set forth in the Trade Secrets Act (18 USC 1905).
- B. If Proprietary Information is orally disclosed to a Party, it shall be identified as such, orally, at the time of disclosure and confirmed in a written summary thereof, appropriately marked by the disclosing party, within fifteen (15) days as being Proprietary Information.
- C. All Proprietary Information shall be returned to the provider thereof at the conclusion of this CRADA at the provider's expense.

- D. All Proprietary Information shall be protected for a period of ____ years from the effective date of this CRADA, unless such Proprietary Information: (1) becomes publicly known without the fault of the recipient, (2) shall come into recipient's possession without breach by the recipient of any of the obligations set forth herein, or (3) was or shall be independently developed by recipient employees who did not have access to such Proprietary Information.
- E. In transferring WSRC's technology to the Participant, WSRC intends that the knowledge of its employees will be shared freely with the Participant's employees assigned to this Project. However, such knowledge will continue to be used in conducting R&D at the Savannah River Site, and will likely be shared with others subject to the limitations set forth in this Agreement.

ARTICLE VIII: OBLIGATIONS AS TO PROTECTED CRADA INFORMATION

- A. Each Party may designate as Protected CRADA Information, as defined in Article I.F, any Generated Information produced by its employees, and with the agreement of the other Party, designate any Generated Information produced by the other Party's employees. All such designated Protected CRADA Information shall be appropriately marked.
- B. For a period of ____ years from the date Protected CRADA Information is produced, the Parties agree not to further disclose such Information except:
- (1) as necessary to perform this CRADA;
 - (2) as provided in Article XI - Reports and Abstracts;
 - (3) as requested by the DOE Contracting Officer to be provided to other DOE facilities for use only at those DOE facilities with the same protection in place;
 - (4) to existing or potential licensees, affiliates, customers or suppliers of the Parties in support of commercialization of the technology with the same protection in place. Disclosure of Participant's Protected CRADA Information under this subparagraph shall only be done with Participant's

consent; or

(5) as mutually agreed by the Parties in advance.

- C. The obligations of paragraph (B) above shall end sooner for any Protected CRADA Information which: (1) shall become publicly known without fault of either Party, (2) shall come into a Party's possession without breach by that Party of the obligations of paragraph (B) above, or (3) shall be independently developed by a Party's employees who did not have access to the Protected CRADA Information.

ARTICLE IX: RIGHTS IN GENERATED INFORMATION

The Parties agree that they shall have no obligations of nondisclosure or limitations on their use of, and the Government shall have unlimited rights in, all Generated Information produced and information provided by the Parties under this CRADA, except for (a) information which is marked as being copyrighted (subject to Article XIII), or as Protected CRADA Information (subject to Article VIII B), or as Proprietary Information (subject to Article VII B), or (b) information that discloses an invention which may later be the subject of a U.S. or foreign Patent application.

ARTICLE X: EXPORT CONTROL

THE PARTIES UNDERSTAND THAT MATERIALS AND INFORMATION RESULTING FROM THE PERFORMANCE OF THIS CRADA MAY BE SUBJECT TO EXPORT CONTROL LAWS AND THAT EACH PARTY IS RESPONSIBLE FOR ITS OWN COMPLIANCE WITH SUCH LAWS.

ARTICLE XI: REPORTS AND ABSTRACTS

A. The Parties agree to produce the following deliverables:

- (1) an initial abstract suitable for public release at the time the CRADA is approved by DOE;
- (2) other abstracts (final when work is complete, and others as substantial

changes in scope and dollars occur);

- (3) a final report, upon completion or termination of this CRADA, to include a list of subject inventions;
- (4) an annual signed financial report of the Participant's in-kind contributions to the project;
- (5) other topical/ periodic reports where the nature of research and magnitude of dollars justify; and
- (6) computer software in source and executable object code format as defined within the Statement of Work or elsewhere within the CRADA documentation.

Each of the above-identified deliverables shall include the project identification number as described in DOE's Research and Development (R&D) Tracking System Data Process Guidance Document (<http://www.doe.gov/rd/>).

- B. The Parties acknowledge that WSRC has the responsibility to provide the above information at the time of its completion to the DOE Office of Scientific and Technical Information (OSTI).
- C. Participant agrees to provide the above information to WSRC to enable full compliance with paragraph B. of this Article.

[DOE has a responsibility to disseminate scientific and technical information by 42 USC 2051(d), 42 USC 2161(b) and 42 USC 2166(b).]

- D. The Parties acknowledge that WSRC and DOE have a need to document the long-term economic benefit of the cooperative research being done under this CRADA. Therefore, the Participant agrees to respond to WSRC's reasonable requests for pertinent information during the term of this CRADA and for a period of ____ years [two to five years would be reasonable] thereafter.

ARTICLE XII: PRE-PUBLICATION REVIEW

- A. The Parties anticipate that their employees may wish to publish technical developments and/or research findings generated in the course of this CRADA. On the other hand, the Parties recognize that an objective of this CRADA is to provide business advantages to the Participant. In order to reconcile publication and business concerns, the Parties agree to a review procedure as follows:
1. Each Party ("Submitter") shall submit to the other Party ("Recipient"), in advance, proposed written and oral publications pertaining to work under the CRADA. Proposed oral publications shall be submitted to the Recipient in the form of a written presentation synopsis and a written abstract.
 2. Recipient shall provide a written response to the Submitter within thirty (30) days, either objecting or not objecting to the proposed publication. The Submitter shall consider all objections of the Recipient and shall not unreasonably refuse to incorporate the suggestions and meet the objections of the Recipient. The proposed publication shall be deemed not objectionable, unless the proposed publication contains Proprietary Information, Protected CRADA Information, export controlled information or material that would create potential statutory bars to filing the United States or corresponding foreign patent applications, in which case express written permission shall be required for publication. In the event an objection is raised because of a potential statutory bar, the Recipient shall file its Patent application within sixty (60) days of making such objection, after which time the Submitter is free to publish.
- B. The Parties agree that neither will use the name of the other Party or its employees in any promotional activity, such as advertisements, with reference to any product or service resulting from this CRADA, without prior written approval of the other Party.

ARTICLE XIII: COPYRIGHTS

- A. The Parties may assert copyright in any of their Generated Information. Assertion of copyright generally means to enforce or give an indication of an

intent or right to enforce such as by marking or securing Federal registration.

- B. Each Party shall have the first option to assert Copyright in works authored by its employees. Copyrights in co-authored works by employees of the Parties shall be held jointly, and use by either Party shall be without accounting. A Party electing not to assert Copyright in a work authored by its employees agrees to assign such Copyright to the other Party upon the request of, and at the expense of, the other Party. The rights of the Participant to license WSRC Copyrighted works is further set forth in Appendix C, Agreement to License.
- C. For Generated Information, the Parties acknowledge that the Government has for itself and others acting on its behalf, a royalty-free, non-transferable, non-exclusive, irrevocable worldwide Copyright license to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government, all Copyrightable works produced in the performance of this CRADA, subject to the restrictions this CRADA places on publication of Proprietary Information and Protected CRADA Information.
- D. For all Copyrighted computer software produced in the performance of this CRADA, the Party owning the Copyright will provide the source code, an expanded abstract as described in Appendix D, the executable object code and the minimum support documentation needed by a competent user to understand and use the software to DOE's Energy Science and Technology Software Center (ESTSC), P.O. Box 1020, Oak Ridge, TN 37831. The expanded abstract will be treated in the same manner as Generated Information in subparagraph C of this Article.
- E. WSRC and the Participant agree that, with respect to any Copyrighted computer software produced in the performance of this CRADA, DOE has the right, at the end of the period set forth in paragraph B of Article VIII hereof and at the end of each two-year interval thereafter, to request WSRC and the Participant(s) and any assignee or exclusive licensee of the Copyrighted software to grant a nonexclusive, partially exclusive, or exclusive license to a responsible applicant upon terms that are reasonable under the circumstances, provided such grant does not cause a termination of any licensee's right to use the Copyrighted computer software. If WSRC or the Participant(s) or any assignee or exclusive

licensee refuses such request, WSRC and the Participant(s) agree that DOE has the right to grant the license if DOE determines that WSRC, the Participant(s), assignee, or licensee has not made a satisfactory demonstration that it is actively pursuing commercialization of the Copyrighted computer software.

Before requiring licensing under this paragraph E, DOE shall furnish to WSRC/Participant(s) written notice of its intentions to require WSRC/Participant(s) to grant the stated license, and WSRC/Participant(s) shall be allowed thirty (30) days (or such longer period as may be authorized by the cognizant DOE Contracting Officer for good cause shown in writing by WSRC/Participant(s)) after such notice to show cause why the license should not be required to be granted. WSRC/Participant(s) shall have the right to appeal the decision by the DOE to the grant of the stated license to the Invention Licensing Appeal Board as set forth in paragraphs (b) - (g) of 10 CFR 781.65, "Appeals".

- F. The Parties agree to place Copyright and other notices, as appropriate for the protection of Copyright, in human readable form onto all physical media, and in digitally encoded form in the header of machine readable information recorded on such media such that the notice will appear in human readable form when the digital data are off-loaded or the data are accessed for display or printout.

ARTICLE XIV: REPORTING SUBJECT INVENTIONS

- A. The Parties agree to disclose to each other each Subject Invention which may be patentable or otherwise protectable under the Patent Act. The Parties agree that WSRC and Participant will disclose their respective Subject Inventions to the DOE and each other within two (2) months after the inventor first discloses the Subject Invention in writing to the person(s) responsible for Patent matters of the disclosing Party.
- B. These disclosures should be in sufficiently complete technical detail to convey a clear understanding, to the extent known at the time of the disclosure, of the nature, purpose and operation of the Subject Invention. The disclosure shall also identify any known actual or potential statutory bars, i.e., printed publications

describing the Subject Invention or the public use or “on sale” of the Subject Invention in this country. The Parties further agree to disclose to each other any subsequent known actual or potential statutory bar that occurs for a Subject Invention disclosed but for which a Patent application has not been filed. All Subject Invention disclosures shall be marked as confidential under 35 U.S.C. 205.

ARTICLE XV: TITLE TO SUBJECT INVENTIONS

Wherein DOE has granted the Participant and WSRC the right to elect to retain title to their respective Subject Inventions, and wherein the Participant has the option to choose, for reasonable compensation, an exclusive license for a pre-negotiated field of use in any of WSRC’s Subject Inventions.

- A. Each Party shall have the first option to elect to retain title to any invention made by its employees. Election shall be made within twelve (12) months of disclosure of the Subject Invention to DOE. If a Party elects not to retain title to any invention of its employees, then the other Party shall have the second option to elect to retain title to such invention under this CRADA. For inventions conceived or first actually reduced to practice under this CRADA which are joint inventions made by WSRC and the Participant, title to such inventions shall be jointly owned by WSRC and the Participant. The DOE shall retain title to any invention which is not retained by any Party. The Intellectual Property rights of WSRC and the Participant are further governed by Appendix C, Agreement to License. *[If the Participant formally notifies WSRC that it does not intend to negotiate an exclusive license in WSRC Subject Inventions, the following sentence shall be added and the introductory clause of this Article and the contents of Appendix C will be modified accordingly.]* The Participant acknowledges that WSRC has offered, and the Participant has declined, an option to choose, for reasonable compensation, an exclusive license in a pre-negotiated field of use for any Subject Invention made in whole or in part by WSRC’s employees.
- B. The Parties acknowledge that the DOE may obtain title to each Subject Invention reported under Article XIV for which a patent application or applications are not

filed pursuant to Article XVI and for which any issued patents are not maintained by any Party to this CRADA.

- C. The Parties acknowledge that the Government retains a non-exclusive, non-transferable, irrevocable, paid-up license to practice or to have practiced for or on behalf of the United States every Subject Invention under this CRADA throughout the world. The Parties agree to execute a Confirmatory License to affirm the Government's retained license.

ARTICLE XVI: FILING PATENT APPLICATIONS

- A. The Parties agree that the Party initially indicated as having an ownership interest in any Subject Inventions (Inventing Party) shall have the first opportunity to file U.S. and foreign patent applications. If the Inventing Party does not file such applications within one year after disclosure, then the other Party (Filing Party) may file patent applications on such Subject Inventions. If a patent application is filed by the Filing Party, the Inventing Party shall reasonably cooperate and assist the Filing Party, at the Filing Party's expense, in executing a written assignment of the Subject Invention to the Filing Party and in otherwise perfecting the patent application, and the Filing Party shall have the right to control the prosecution of the patent application. The Parties shall agree between themselves as to who will file patent applications on any joint Subject Invention.
- B. The Parties agree that DOE has the right to file patent applications in any country if neither Party desires to file a patent application for any Subject Invention. Notification of such negative intent shall be made in writing to the DOE Contracting Officer within three (3) months of the decision of the non-Inventing party to not file a Patent application for the Subject Invention pursuant to Article XV, or not later than sixty (60) days prior to the time when any statutory bar might foreclose filing of a U.S. patent application.
- C. The Parties agree to include within any U. S. or foreign Patent application or any Patent issuing thereon covering a Subject Invention, the following statement:
"This invention was made under a CRADA under prime Contract No.

with the U. S. Department of Energy. The Government has certain rights in this invention.”_

- D. A Party electing title or filing a Patent application in the United States or in any foreign country shall advise the other Party and the DOE if it no longer desires to continue prosecution, pay maintenance fees or retain title in the United States or any foreign country. The other Party and then the DOE will be afforded the opportunity to take title and retain the Patent rights in the United States or any such foreign country.

ARTICLE XVII: TRADEMARKS

The Parties may seek to obtain Trademark/Service Mark protection on products or services generated under this CRADA in the United States or foreign countries. *[The ownership and other rights relating to this Trademark shall be as mutually agreed to in writing by the Parties.]* The Parties hereby acknowledge that the Government shall have the right to indicate on any similar goods or services produced by or for the Government that such goods or services were derived from and are a DOE version of the goods or services protected by such Trademark/Service Mark, with the Trademark and the owner thereof being specifically identified. The Government shall also indicate that the Trademark owner has had no right to perform a quality review/inspection of the DOE version of the goods. In addition, the Government shall have the right to use such Trademark/Service Mark in print or communications media.

ARTICLE XVIII: MASK WORKS

The Parties may seek to obtain legal protection for Mask Works fixed in semiconductor products generated under this Agreement as provided by Chapter 9 of Title 17 of the United States Code. *[The rights to any Mask Work covered by this provision shall be as mutually agreed to in writing by the Parties.]* The Parties hereby acknowledge that the Government or others acting on its behalf shall retain a non-exclusive, paid-up, worldwide, irrevocable, nontransferable license to reproduce, import, or distribute the covered semiconductor product by or on behalf of the Government, and to reproduce and use the Mask Work by or on behalf of the Government.

ARTICLE XIX: COST OF INTELLECTUAL PROPERTY PROTECTION

Each Party shall be responsible for payment of all costs relating to Copyright, Trademark and Mask Work filing; U. S. and foreign Patent application filing and prosecution; and all costs relating to maintenance fees for U. S. and foreign Patents hereunder which are owned by that Party

ARTICLE XX: REPORTS OF INTELLECTUAL PROPERTY USE

The Participant agrees to submit, for a period of ____ years from the date of termination or completion of this CRADA and upon request of DOE, a nonproprietary report no more frequently than annually on efforts to utilize any Intellectual Property arising under the CRADA.

ARTICLE XXI: DOE MARCH-IN RIGHTS

For Subject Inventions made solely by the Participant and for assignments and exclusive licenses by WSRC to the Participant in Subject Inventions made in whole or in part by WSRC, the DOE shall retain the right to require the Participant to grant a responsible applicant a nonexclusive, partially exclusive, or exclusive license to use the invention in a field of use of interest to the applicant, on terms that are reasonable under the circumstances, or if the Participant fails to grant such a license, to grant the license itself. DOE may exercise this right only in exceptional circumstances and only if DOE determines that (1) the action is necessary to meet health or safety needs that are not reasonably satisfied by the Participant; (2) the action is necessary to meet the requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the Participant; or (3) the Participant has failed to comply with the provisions of Article XXII - "U. S. Competitiveness" of this Agreement.

For all other rights retained or transferred by WSRC in its Subject Inventions, WSRC acknowledges that the DOE has certain march-in rights in accordance with 48 CFR 27.304-1(g).

ARTICLE XXII: U.S. COMPETITIVENESS

The Parties agree that a purpose of this CRADA is to provide substantial benefit to the U.S. economy.

- A. In exchange for the benefits received under this CRADA, the Participant therefore agrees to the following:
 - 1. Products embodying Intellectual Property developed under this CRADA shall be substantially manufactured in the United States, and
 - 2. Processes, services and improvements thereof which are covered by Intellectual Property developed under this CRADA shall be incorporated into the Participant's manufacturing facilities in the United States either prior to or simultaneously with implementation outside the United States. Such processes, services, and improvements, when implemented outside the United States, shall not result in reduction of the use of the same processes, services, or improvements in the United States.
- B. WSRC agrees to a U. S. Industrial Competitiveness clause in accordance with its prime contract with respect to any licensing and assignments of its intellectual property arising from this CRADA, except that any licensing or assignment of its intellectual property rights to the Participant shall be in accordance with the terms of Paragraph A of this Article.

ARTICLE XXIII: ASSIGNMENT OF PERSONNEL

- A. Each Party may assign personnel to the other Party's facility as part of this CRADA to participate in or observe the research to be performed under this CRADA. Such personnel assigned by the assigning Party shall not during the period of such assignments be considered employees of the receiving Party for any purposes, including but not limited to any requirements to provide workers' compensation, liability insurance coverage, payment of salary or other benefits, or withholding of taxes.

- B. The assigning Party's employees and agents shall observe the routine administrative work rules (for example, working hours, security and safety rules, and holiday schedule) of the receiving Party while working on the receiving Party's premises. The receiving Party shall have the reasonable right to approve the assignment of personnel or request their removal by the assigning Party.
- C. The assigning Party shall bear any and all costs and expenses with regard to its personnel assigned to the receiving Party's facilities under this CRADA. The receiving Party shall bear facility costs (for example, access to telephones and utilities, use of laboratory, manufacturing or other work areas, as appropriate) of such assignments.

ARTICLE XXIV: FORCE MAJEURE

No failure or omission by WSRC or Participant in the performance of any obligation under this CRADA shall be deemed a breach of this CRADA or create any liability if the same shall arise from any cause or causes beyond the control of WSRC or Participant, including but not limited to the following, which, for the purpose of this CRADA, shall be regarded as beyond the control of the Party in question: Acts of God; acts or omissions of any government or agency thereof; compliance with requirements, rules, regulations, or orders of any governmental authority or any office, department, agency, or instrumentality thereof; fire; storm; flood; earthquake; accident; acts of the public enemy; war; rebellion; insurrection; riot; sabotage; invasion; quarantine; restriction; transportation embargoes; or failures or delays in transportation.

ARTICLE XXV: ADMINISTRATION OF THE CRADA

WSRC enters into this CRADA under the authority of its prime contract with DOE. WSRC is authorized to and will administer this CRADA in all respects unless otherwise specifically provided for herein. Administration of this CRADA may be transferred from WSRC to DOE or its designee with notice of such transfer to the Participant, and WSRC shall have no further responsibilities except for the confidentiality, use and/or nondisclosure obligations of this CRADA.

ARTICLE XXVI: RECORDS AND ACCOUNTING FOR GOVERNMENT PROPERTY

The Participant shall maintain records of receipts, expenditures, and the disposition of all Government property in its custody related to the CRADA.

ARTICLE XXVII: NOTICES

- A. Any communications required by this CRADA, if given by postage prepaid first class U. S. Mail or other verifiable means addressed to the Party to receive the communication, shall be deemed made as of the day of receipt of such communication by addressee, or on the date given if by verified facsimile. Address changes shall be given in accordance with this Article and shall be effective thereafter. All such communications, to be considered effective, shall include this CRADA number.
- B. The addresses, telephone numbers and facsimile numbers for the Parties are as follows:

WSRC: Westinghouse Savannah River Company LLC
Attention: William R. Hull
Address: Savannah River Site, Building 719-4A
Aiken, South Carolina 29808
Phone: (803) 725-2555
Fax: (803) 725-2562

PARTICIPANT: _____
Attention: _____
Address: _____

Phone: _____
Fax: _____

ARTICLE XXVIII: DISPUTES

- A. The Parties shall attempt to settle any claim or controversy arising from this CRADA through consultation and negotiations in good faith and a spirit of mutual cooperation. If those attempts fail, then the dispute will be mediated by a mutually acceptable mediator chosen by the Parties within 30 days after written notice by one party demanding mediation. Neither Party may unreasonably withhold consent to the selection of a mediator, and the Parties will share the costs of the mediation equally.
- B. Any dispute which cannot be resolved between the Parties through negotiation or mediation shall be resolved by binding arbitration in Aiken, South Carolina, under the then current rules of the American Arbitration Association. Controversy or claims regarding patent infringement or patent validity shall not be subject to arbitration but instead shall be adjudicated in a Federal court of competent jurisdiction. This CRADA and the performance thereunder shall be governed by Federal law. To the extent that there is no applicable Federal law, this CRADA and performance thereunder shall be governed by the law of the State of South Carolina.
- C. It is the policy of WSRC that all employees, in the performance of their responsibilities, shall adhere to the highest possible standards of ethical and business conduct. WSRC has established an Ombudsman in the WSRC Ethics Office. The Ombudsman is responsible for helping to resolve Sponsor complaints, disputes, or inquiries, arising under this Agreement when such concerns have not been resolved by responsible WSRC officials. The Ombudsman may be contacted by phone at (803) 725-2611. The Ombudsman will investigate the complaint or inquiry and provide the caller with a response. The caller may remain anonymous, if he or she chooses.

ARTICLE XXIX: ENTIRE CRADA AND MODIFICATIONS

- A. This CRADA with its Appendices A, B, C, and D, incorporated herein, contains the entire agreement between the Parties with respect to the subject matter hereof, and all prior representations or agreements relating hereto have been

merged into this document and are thus superseded in totality by this CRADA. This CRADA shall not be effective until approved by DOE.

- C. Any agreement to materially change any terms or conditions of this CRADA or the Appendices shall be valid only if the change is made in writing, executed by the Parties hereto, and approved by DOE.

ARTICLE XXX: TERMINATION AND COMPLETION CLOSE-OUT

- A. This CRADA may be terminated by either Party upon thirty (30) days written notice to the other Party. This CRADA may also be terminated by WSRC in the event of failure by the Participant to provide the necessary advance funding, as agreed in Article III (if applicable). In the event of termination by either Party, each Party shall be responsible for its share of the costs incurred through the effective date of termination, as well as its share of the costs incurred after the effective date of the termination, and which are related to the termination.
- B. In the event of termination or upon CRADA completion, the confidentiality, use, and non-disclosure rights and obligations of this CRADA shall survive the termination or completion of the CRADA.
- C. Furthermore, in the event of termination or upon CRADA completion, Proprietary Information shall be returned within forty-five (45) days of the termination date or completion date to the Party that provided or developed it.
- D. Within forty-five (45) days of the termination date or CRADA completion date, the Parties shall schedule a meeting to discuss the allocation of rights and responsibilities to Generated Information, Protected CRADA Information, RD&D, Intellectual Property, and Background Intellectual Property. Any such agreement shall be subject to the rights of the Government as set forth in this Agreement.

FOR WSRC: **WESTINGHOUSE SAVANNAH RIVER COMPANY LLC**

BY: _____

NAME: _____

TITLE: _____

DATE: _____

FOR PARTICIPANT: _____

BY: _____

NAME: _____

TITLE: _____

DATE: _____

APPENDIX A

STATEMENT OF WORK

Related to WSRC CRADA No. CR-_____

A. EXECUTIVE SUMMARY

1. Parties:

This is a collaborative effort between Westinghouse Savannah River Company LLC (WSRC) and _____ (Participant's Name) for _____ (Project Title).

2. Background:

Provide a brief overview as to the background of the Subject technology as it relates to the commercial marketplace importance/role of the technology; Participant's/U.S. Industry's relative competitive position in the worldwide/national marketplace; technological barriers faced, etc.

3. Desired Goals/Accomplishments:

Briefly summarize the overall goals/accomplishments expected from this collaborative effort.

4. Benefits to DOE Program:

Describe specific benefits of this work to one or more SRS or DOE Complex missions or how this work supports or promotes SRS core competencies. (DOE/SR will not approve any proposed CRADA which fails to address these matters.)

B. SCOPE

1. Technical Objectives:

Provide an explanation as to the means of achieving specific project results/product(s).

2. Project Phases/Tasks, Division of Responsibilities and Tasks:

Provide a schedule of work, including the specified phases of the project in terms of the time needed to complete each milestone and/or phase. Explain the relationship between phases, including timing if relevant. Summarize the tasks, clearly stating which party is responsible for each task. If applicable, describe relationships between or among tasks.

3. Schedules

List the major milestones by Section 2 task to ensure that work proceeds on a timely basis to enable completion of scheduled effort within the established budget and periods of performance.

4. Deliverables:

List the items (reports, prototypes, etc.) to be delivered for each phase or task, as appropriate.

5. Principal Investigators:

Identify one Principal Investigator (PI) and one alternate contact from each Party (include: name, job title, address, work phone, fax, and E-Mail address).

6. Services:

*Provide a description of services (**i.e., not Property**) which will be performed by each Party. Example: 100 analyses by WSRC.*

7. On-Site Work by Participant

State whether any work by the Participant will be performed on the Savannah River Site and the extent to which the work will be subject to the WSRC Integrated Safety Management System (ISMS) Standards/Requirements Identification Document WSRC-RP-94-1268.

8. Property:

*Identify any personal property (**not land or buildings**), contributed or produced used in the CRADA or produced as a result of the CRADA.*

9. Procedures for Interaction Between the Parties:

Outline procedures for meeting minutes, phone logs, correspondence file, etc.

10. Environmental Issues, and Health & Safety Issues:

Identify and address any issues having the potential to impact the environment, the health and safety of personnel directly involved in the performance of the CRADA, or pertaining to materials, equipment or other tangible property exchanged between the Parties in conducting the work defined by this Agreement. State the results of the NEPA review conducted with respect to this project and any specific adverse findings which need to be addressed as well as their impact on CRADA schedules and milestones.

C. ESTIMATED COST AND SOURCE OF SUPPORT

1. Total Funding Summary:

Identify funding amounts and sources for the CRADA using the following table.

	Year 1		Year 2		Year 3		Totals	
Funding Type	Funds-in	In-kind	Funds-in	In-kind	Funds-in	In-kind	Funds-in	In-kind
Participant 1								
Participant 2								
Federal Admin Charge if applicable		NA		NA		NA		NA
Participant Total								
DOE Contribution								
Total								

2. Participant Contribution:

Specify the Participant's contribution to the CRADA in terms of (1) the funding (funds-in) each Participant will provide to WSRC, and identify the three percent Federal Administrative Charge (FAC) applicable to these funds in the block provided and (2) the value of in-kind contributions to be provided by the Participant such as personnel, supplies, expenses, equipment, facilities and services for each fiscal year. In-kind contributions are not subject to the 3 percent administrative charge. Participant expenditures incurred prior to execution of the CRADA generally may not be claimed as "in-kind" contributions. Use attachments as appropriate.

3. DOE Contribution:

Specify the DOE's contribution to the CRADA in terms of funding for personnel, facilities and services. Address any unusual funding or cost elements such as capital funding, leases or subcontracts. Identify any funding derived from other related agreements. The Federal Administrative Charge is not applicable on DOE funds.

4. Federal Administrative Charge:

If appropriate, request waiver of the three (3) percent Federal administrative charge (calculated based upon the Participant's direct cash - "funds-in" contribution) if the Participant is a small or minority business, university, or State or county government. Identify the benefiting DOE program.

5. Funding Source:

Identify funding B&R code(s) and the DOE Headquarters Program Office, the Technology task Plan (TTP) and the DOE-SR Point of Contact/Sponsor.

APPENDIX B

BACKGROUND INTELLECTUAL PROPERTY

Related to WSRC CRADA No. CR-_____

The Parties to this CRADA have identified below, on a best efforts basis, Background Intellectual Property (BIP), as defined in Article I.L. The Parties each recognize that they have a continuing obligation to review and disclose BIP during the course of performance of this CRADA.

Licensing or use arrangements that may be needed to avoid infringement of BIP rights in the practice of CRADA developed technology are addressed in Appendix C to this CRADA.

WSRC:

(Participant Name):

APPENDIX C

AGREEMENT TO LICENSE

Related to WSRC CRADA No. CR-_____

Subject to the provisions of the CRADA between Westinghouse Savannah River Company LLC (WSRC) and _____
_____(Participant) for the transfer of technology resulting from the _____(title of project) (TBD) _____, the Parties do agree as follows:

1. To the extent that WSRC obtains title or authority to license Intellectual Property first arising out of or produced under this CRADA, WSRC shall negotiate in good faith with Participant for a limited exclusive license to rights in such Intellectual Property for the time periods set forth in Paragraph 3 of this Agreement To License.
2. Any such license(s) to be granted to the Participant shall be based upon reasonable commercial terms, and will be negotiated at the conclusion of this CRADA unless rights are required by the Participant for commercialization at an earlier date. In this case, WSRC will negotiate in good faith with Participant for license rights following WSRC filing for title of Intellectual Property. Any such license(s) will relate to the Field of Use defined as:

(Describe Field of Use)

3. The exclusive period reserved for the Participant to negotiate a license to Intellectual Property shall be for the life of this CRADA plus a period of not more than six (6) months after the completion or termination of this CRADA.
4. WSRC will require an acceptable preliminary marketing plan for the business opportunity sought by the Participant prior to the execution of any license agreement. WSRC will require diligent pursuit in the commercialization of Intellectual Property licensed from WSRC, which will include reasonable performance milestones and a royalty stream.

5. The Parties acknowledge that the Government or others acting on its behalf retains a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States every Subject Invention and Intellectual Property developed under this CRADA.
6. Additionally, the Parties agree to make available to the Government or others acting on behalf of the Government for research and demonstration work only, nonexclusive, nontransferable, irrevocable, paid-up license(s) to other inventions or Intellectual Properties owned or controlled by the Party(ies), the infringement of which cannot necessarily be avoided upon the practice of any Subject Invention and Intellectual Property.
7. Both Parties represent that on a best efforts basis, existing Background Intellectual Property is identified in Appendix B to this CRADA. If there are other Intellectual Properties, owned or controlled by either Party to this CRADA, that are needed by either side for the effective and timely commercialization of technology developed under this CRADA, the Party or Parties, subject to internal policy and prior commitments, may make such Intellectual Properties available under appropriate licenses or other use arrangements.

FOR WSRC: WESTINGHOUSE SAVANNAH RIVER COMPANY LLC

BY: _____

NAME: _____

TITLE: _____

DATE: _____

FOR PARTICIPANT:

BY: _____

NAME: _____

TITLE: _____

DATE: _____

APPENDIX D

ABSTRACT FORMAT DESCRIPTION

(Character limit for any one field: 2,000)
(Character limit for all information: 9,000)
Text only; no diagrams or flowcharts

Due to the differences in size and complexity among software packages and the corresponding differences in their respective documentation requirements, a specific form for the required Abstract document has not been provided. Instead, this Abstract Format Description contains a listing of the data elements required for the Abstract and a brief description of each data element. The person assembling the submittal package is expected to create the Abstract document using a text editor. Please note that each of the listed data elements is REQUIRED, and a response for each data element MUST be included in the completed Abstract document.

1. Identification. Provide the following two fields to be used to uniquely identify the software. The software acronym plus the short or KWIC (keywords in context) title will be combined to be used as the identification of the software.

Software Acronym (limit 20 characters). The name given to the main or major segment of module packaged usually becomes the name of the code package. If an appropriate name is not obvious, invent one which is related to the contents.

Short or KWIC title (limit 80 characters). This title should tell something of the nature of the code system: calculational method, geometry, or any feature that distinguishes this code package from another. It should be telegraphic in style, with no extraneous descriptors, but more than a string of keywords and phrases. The word "code" (alone) and "program" do not belong in a description of a code "package."
2. Author Name(s) and Affiliations. List author(s) or contributor(s) names followed by the organizational affiliation. If more than one affiliation is applicable, please pair authors with their affiliations.
3. Software Completion Date. List approximate date(s) that the version of the executable module(s), which will be created by the submitted program modules, was first used in an application environment.
4. Brief Description. Briefly describe the purpose of the computer program, state the problem being solved, and summarize the program functions and capabilities. This will be the primary field used for announcement purposes.
5. Method of Solution. Provide a short summary of the mathematical methods, engineering principles, numerical algorithms, and procedures incorporated into the software.
6. Computer(s) for which software is written. List the computer(s), i.e., IBM3033, VAX6220, VAX, IBM PC, on which this submittal package will run.
7. Operating System. Indicate the operating system used, release number, and any deviations or exceptions, i.e., is the operating system "off the shelf" with no modifications, or has the operating system been modified/customized. If modified, note modifications in field 11.
8. Programming Language(s) Used. Indicate the programming language(s) in which the software is written along with the approximate percentage (in parentheses) of each used. For example, FORTRAN IV (95%); Assembler (5%).
9. Software Limitations. Provide a short paragraph on any restrictions implied by storage allocation, such as the maximum number of energy groups and mesh points, as well as those due to approximations used, such as implied argument-range limitations. Also to be used to indicate the maximum number of users, etc. or other limitations.
10. Unique Features of the Software. Highlight the advantages, distinguishing features, or special capabilities which may influence the user to select this package over a number of similar packages.
11. Related and Auxiliary Software. If the software supersedes or is an extension of earlier software, identify the original software here. Identify any programs not considered an integral part of this software but used in conjunction with it (e.g., for preparing input data, plotting results, or coupled through use of external data files). Note similar library software, when known.
12. Other Programming or Operating Information or Restrictions. Indicate file naming conventions used, e.g., (filename).DOC (DOC is a filename extension normally used to indicate a documentation file), additional subroutines, function libraries, installation support software, or any special routines required for operation of this package other than the operating system and programming language requirements listed in other fields. If proprietary software is required, this should also be indicated.
13. Hardware Requirements. List hardware and installation environment requirements necessary for full utilization of the software. Include memory and RAM requirements, in addition to any nonstandard features.
14. Time Requirements. Include any timing requirement estimations, both wall clock and computer clock, necessary for the execution of the package. Give enough detail to enable the potential user to estimate the execution time for a given choice of program parameters

- (e.g., 5-10 min.).
15. References. List citations of pertinent publications. List (by author, title, report number, bar code or order number if available, and date). References are to be broken down into two groupings:
 - (a) Reference documents that are provided with the submittal package.
 - (b) Any additional background reference materials generally available.
 16. Categorization and Keywords.
 - a. Subject Classification Code - Chosen from the Subject Classification Guide (Appendix E of ESTSC--I), this one-letter code designation is to be supplied by the submitter.
 - b. Keywords - Submitters should include keywords as taken from the ESTSC thesaurus listing (Appendix F of ESTSC--I). Keywords chosen that are not on the list will be subject to ESTSC approval before being added to the thesaurus. Subsequent revision lists will be available. ESTSC may also add additional keywords to aid in the indexing of the material.

	c. EDB Subject Categories – Energy-related categories (6-digit) to be assigned by ESTSC per the Energy Science and Technology Database (EDB) schema for a further breakdown of subject area.
17.	Sponsor. This field input by ESTSC from information provided on the Primary Submittal Form, represents the program office or division responsible for funding the software.
18.	Material Available. This field, input by ESTSC, is taken from information provided on the submittal forms. It will be composed of: <ol style="list-style-type: none"> a. Contents of the package available for distribution. b. Computer media quantity.
19.	Status. This field, input by ESTSC for submittals other than from SIACs, consists of a dialog of information concerning: when the package was announced; subsequent versions and dates; what level of testing has been performed at NESC, SIACs, or ESTSC, etc.

Note: The box above indicates data elements that will be determined by ESTSC, consisting of data extracted from other information provided within the submittal package.